TRAINING AND SIMULATION

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Armed With Music Players, Soldiers Hunt for Insurgents

Section 1 Transfer

ORLANDO — As they prepare for their daily patrols around Baghdad, soldiers from the 10th Mountain Division sync up their iPods, not with songs and movies, but with a laundry list of missions and audio files containing pre-recorded phrases in Iraqi Arabic or Kurdish.

Loaded with special software, the music players help them communicate with the populace and learn the local culture, and they occasionally serve as handy tools in their tactical missions, such as searching for persons of interest. The gadgets have been so useful that troops are now finding new ways to employ the technology.

The Army so far has purchased 300 of the Vcommunicator Mobile LC devices. Since last fall, squad leaders from the 10th Mountain Division's 1st and 4th Brigades have been using the product in Iraq.

The simplicity that has made the iPod, manufactured by Apple Inc., so successful as a music player also relates to its combat applications. Soldiers simply scroll through as they search for mission data or for spoken phrases. The display shows the sentence phonetically and in script, and the user can play the corresponding audio clip, which also can be synced to an avatar, or computerized character, that gestures according to customs.

Connected to a speaker or megaphone, the device functions as a one-way language translator. Prior to having these devices, troops had to wait for an interpreter before they could engage local residents during patrols.

"We had very little training for the systems, because they're so easy to operate," said Cory Youmans, director for acquisition support at the Army's program executive office for simulation, training and instrumentation, or PEO STRI. "The vast majority of soldiers intuitively know how to operate an iPod."

That was one of the selling points for the product, he added. Soldiers in general are looking for lightweight equipment that is simple to operate and requires little maintenance and power, Youmans said in an interview.

The creator of the VCommunicator software — Orlando-based Vcom3D Inc. — originally designed it to teach soldiers basic Iraqi Arabic phrases. But now troops are finding new tactical applications for the device, said Ernie Bright, product manager at Vcom3D.

Troops also are uploading maps and other images and content onto the video iPods to assist them at vehicle checkpoints and door-to-door searches, said Bright.

If soldiers are looking for a particular individual, they can load a photo of their target and correlate it to Arabic script that asks, "Do you recognize this person?"

Troops also can store sound clips and other pertinent information that they need to conduct mission briefs for small units, said Bright.

The most recent version of the Vcommunicator comes on the new iPod nano, which troops are strapping to their wrists or wearing on lanyards around their necks.

The nano units are much faster, much smaller and more user-friendly, said Youmans. "That's one of the benefits of using commercial off-the-shelf — the technology advances really quickly," he told National Defense in a phone interview.

The nano variants were completed in time for the 4th Brigade's deployment last fall, he said.

The devices also come in languages that are suitable for operations in Afghanistan. In October, during a training exercise at Fort Polk, La., soldiers from the 101st Airborne Division tested iPod nanos programmed with the Dari and Pashto languages. Youmans said he expects the unit will request the devices for future deployments.

In the latest version, Vcom3D added a "vocabulary list" feature and expanded sections on basic conversation, winning the hearts and minds, intelligence gathering, detained processing, medical care, training, crowd control and improvised explosive device sweeping.

"Having key phrases in there, a simple thing like, 'Would you like to play a game of soccer,' or 'Can I give your children these gifts," helps to build rapport, said Bright.

The vocabulary list is broken down into categories that include Army supplies, medical intervention, directions and colors.

An entry for the word pistol, for example, brings up an image of the object. The next screen gives the phonetic pronunciation of the word in the selected language, and then the word written out in script.

The Army awarded Vcom3D a contract for the iPod translator following a request by the 10th Mountain Division for a multifunctional, multimedia language and cultural learning device that was based on the iPod or a Windows Mobile PDA.

The division wanted a system that provided one-way language translation, a mission-specific vocabulary trainer, a multimedia cultural awareness tool, and an authoring tool that would allow units to build or modify phrases into existing

missions. The system also needed to be flexible enough so that soldiers could make modifications as needed, said Youmans.

"We found out that the only vendor out there that had a device that met all the requirements was Vcom3D," he said.

As an Army reservist, Youmans deployed twice to Iraq and Kuwait. On his rotation there in 2004, he commanded the 375th Transportation Group.

"I can tell you it would have been nice for my soldiers to have had such a device, because we did not have the luxury of having translators available to support our convoys going up into Iraq. If we had a device like this, it sure would have made life easier for our soldiers going into harm's way," he said.

"As the convoys ran up the main supply routes, sometimes they would get stopped and the local people would come out to see what was going on. Many times, they would get very close to the trucks and soldiers.

Sometimes kids would climb on the trucks ... If we had had the ability to communicate to them in their language, 'please get off the truck, please stay away, we don't want you to get hurt,' we could have avoided an unhappy situation," he added.

PEO STRI plans to deploy a team to Iraq to evaluate how the devices are performing in the inhospitable environment and weather conditions.

"The nice thing is, because they're commercial, they're cheap to replace," he said. Each device costs \$200 to \$300.

Soldiers who are operating the iPods already have been inquiring about how to adapt the devices for other applications. One group in particular asked if it would be possible to connect the iPods to a plasma or LCD display at vehicle checkpoints so the images can be seen more clearly, said Youmans.

Bright said the company already is supplying the accessories to make that possible.

This year Vcom3D plans to offer a commercial version of its software geared toward travelers, said Carol Wideman, president of the company. She said the company's long-term goal is to make it available on the mobile device of choice.

